# Toolbox

# Ladder Extends 3 Feet Above Landings

1926.1053(b)(1)

Rank in Frequency Cited #21

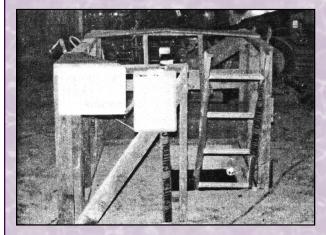
### Rule

When using portable ladders to access an upper landing surface, the ladder side rails must extend at least 3 feet (.9 m) above the landing surface where the ladder is being used; or when such an extension is not possible because of the ladder's length, the ladder must be secured at its top to a rigid support that will not deflect, and a grasping device—such as a grabrail—must be provided to assist employees in mounting and dismounting the ladder. The extension must never be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support.

#### Intent

The rule protects employees during two critical phases of ladder climbing:

- When employees are on the ladder and their movement may affect the ladder and its support points, making it slip or fall; and
- When the employee is either getting on or off the ladder. If nothing is available to grab and provide support, the employee will be in a bent-over position and his or her center of gravity may be outside the vertical line of normal body position, making the employee vulnerable to a fall.



# □ VIOLATION IN COMPLIANCE

The portable ladder extends 3 feet above the opening (landing) of the confined space.

Note: The guarding of the floor hole except at the entrance for the ladder is acceptable.

The rule specifies: Side rails must extend 3 feet above the landing. Or when this is not possible, secure side rails at the top to a rigid support—e.g., by tying with rope or boxing in with lumber—and provide a grab device. The grasping device can be made of metal or lumber and can be part of the structure, providing its location does not create a hazard in itself and it can be easily grasped. In addition, secure ladders to prevent them from deflecting and slipping while in use.

## Hazards

- Slip and fall from elevation.
- Probable injuries range from death to broken bones and sprains/strains.

## (Among Other) Suggested Abatements

- Abatement is obvious. Construct/use ladders according to specification requirements.
- Instruct employees and supervisors to inspect ladders during each shift in their work area.

### Selected Case Histories

An employee climbing a 10-foot ladder to access a landing 9 feet above the adjacent floor fell when the ladder slid down. He sustained fatal injuries. Although the ladder had slip-resistant feet, it was not secured, and the railings did not extend 3 feet above the landing.

### Comments

- This standard covers only portable ladders. A similar requirement for fixed ladders is outlined in *Title 29 Code of Federal Regulations (CFR)* 1926.1053(a) (24).
- This is a specification standard that is easily identified and substantiated as a violation—as evidenced by its high ranking on the 100 Most Cited Physical List. Therefore, the contractor must continually audit the site to ensure compliance with this rule.

# Additional Documents to Aid in Compliance

• 29 CFR Subpart X. JSHQ